Remarks/Arguments

This Amendment in Support of a RCE is submitted in response to the Final Office Action in this case, dated June 8, 2005, interviews between Examiner Lieu and the undersigned on August 22, 2005 and September 8, 2005, and The Examiner's Advisory Action, dated September 8, 2005. In the Final Office Action, the Examiner rejected claims 1-4, 6, 7 (which had been cancelled in the previous response) and 9-12 under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,160,842 to Johnson (the inventor of the subject matter of this Application), and U. S. Patent No. 5734,335 to Brogi *et al.* Claims 5 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over '842 in view of '335 and further in view of U. S. Patent No. 5,381,338 to Wysocki *et al.* The Examiner rejected claims 1-5 under 35 U.S.C. § 112, 1st paragraph, as failing to comply with the written description requirement, specifically, the Examiner stated that "The specification fails to state that the collected data is spatially independent from ground-based data." In the Advisory Action, the Examiner noted U. S. Patent No. 5,832,187 to Pedersen *et al.*, granted November 3, 1998, on an Application filed November 3, 1995.

The Interviews

In the course of the interview on August 22, I pointed out that the 35 U.S.C. § 112, 1st paragraph was not appropriate, because virtually every portion of the Application describes and defines the method of the invention as gathering data on the airborne platform. Probably the best example is Fig. 1, wherein all of the data is gathered by instrumentalities on the airborne platform, and wherein the gathered data is transmitted as telemetry, only downward, to a

ground station for use by ground based personnel. Reference numeral 12 is directed to the sensors, which are carried on the airborne platform. Thus, the statement that "The specification fails to state that the collected data is spatially independent from ground-based data" is not correct: virtually every portion of the specification, drawing and claims describes that the data is gathered by airborne sensors which are spatially independent from ground-based data.

Once this point is accepted by Examiner Lieu, the remaining 35 U.S.C. § 103(a) rejections should be withdrawn, as both '842 and '335 rely on ground-based sensors. '842 incorporates some, but not all, of the sensors on an airborne platform; '335 is entirely ground based. '338 relates only to use of GPS information, which Applicant acknowledges is old in the position locating art.

Examiner Lieu suggested that an Amendment After Final be submitted to raise the issues discussed, but not resolved, in the course of the interview. In the brief interview on September 8, 2005, the Examiner explained that she had located the '187 patent, which might be applied in the course of continuing prosecution.

The Applied Art

As previously noted, Applicant's prior '842 patent does not place all of the sensors on the airborne platform, and, in fact, the airborne platform was required to land to download information. '335 is entirely ground based. '187, if applied, uses airborne and ground-based sensors, and operates under ground-based control.

'842 does not gather, and clearly does not commonly utilize, critical alignment data. '842, from an aerial location, *gathers ground-associated data -- not high-overhead, critical*

alignment, atmospheric data. '335 does not gather overhead-generalized, and then commonly used, critical alignment data. The data gathered by the '335 approach is definitively *local ground-site specific.* The concept of common utilization, as discussed herein in relation to the invention, pertains to *the common use of aerial, overhead-gathered, critical alignment data which is relevant for all regions along an overhead observed fire line.*

U. S. Patent No. 5,832,187, describes a system using airborne platforms under the control of ground-based fire monitors, regardless of the type of airborne platform.

Even assuming that a combination of '842 and '335 is permissible for some purposes, these two references do not collectively suggest the overhead gathering of true, generalized critical alignment information which is then employed as a guiding force in assessing the need to address fire conditions extant at plural, different regions along a widely distributed fire line. '842 and '335 merely collect close-to-ground data which cannot function as critical alignment data. '187 depicts use of GPS for location information of the airborne platform, however, the platform is under ground-control, unlike the invention of Applicant.

The applied '338 patent does nothing to mend the deficiencies of '842 and '335.

The Claims

The specification makes it very clear that critical alignment data is collected at a single, *high-elevation, aerial* site in the immediate vicinity of the illustrated airborne helicopter, and then downlinked for common uses in relation to fire activities occurring at a plural, different regions along a fire perimeter. Critical alignment data contains plural, as distinguished from singular, atmospheric parameters in order to be useful. Additionally, it is gathered, in accordance

with practice of the present invention, and as it must be in order to be relevant and useful, aerially well over and remotely above a fire line where it cannot be compromised by ground-site, local-only data. Such ground-site specific data does not picture accurately the kind of important, more generalized conditions which a fire manager needs to know. The generalized, overhead critical alignment data which is captured in the practice of the present invention has powerful common relevance with respect to plural, different regions along a fire perimeter. '187, if applied, does not gather and compile such data.

Amendments to claims 1, 4, 6, 10, and 11 herein include further clarification that the data is gathered solely from sensors located on an airborne platform, to emphasize this important concept of collecting overhead-generalized, critical alignment atmospheric data which is download-linked for use with respect to many locations on a fire line. No such collecting takes place at specific ground locations -- a collecting which would not give a high-level picture of meaningful critical alignment factors necessary for the most effective fire-management practices.

Claim 1 is allowable over the applied art because the applied art does not teach nor suggest the gathering of linked thermal and optical imagery data and critical-alignment, fire-information evaluation data solely from airborne sensors where such data is spatially independent from ground-based data. Neither reference, taken alone or in combination, teaches or suggests this method. '187, if applied, does not teach nor suggest the gathering and compilation of such data.

Claim 2 is allowable because the data obtained by the applied reference is ground-based data; *e.g.*, LORAN C, a ground-based system, was used in the reference to provide location

data. Further, the reference was not capable of providing associated angular disposition in space of the associated substantially common line-of sight along which optical and thermal data was gathered for a specific region. Claim 2 is allowable over the applied art.

As in the case of claim 2, the elements of claim 3 simply were not provided in the applied reference. There was no airborne mechanism to correlate the information from all of the airborne sensors. Claim 3 is allowable over the applied art.

Claim 4 has been amended to further emphasize that the data is gathered solely on the airborne platform. The Examiner states that provision of ranging information would have been obvious, however, it is not provided in either of the applied references. Claim 4 is allowable over the applied art, or with its allowable parent claims.

Claim 5 is allowable with its allowable parent claim.

Claim 6 is allowable for the reasons set forth in connection with claim 1: the combination of the applied references do not teach or suggest provision of a system wherein all data is gathered from an airborne platform.

Claim 8 is allowable with its allowable parent claim.

Claim 9 is allowable for the reasons set forth in connection with claim 4.

Claims 10 and 11 are allowable for the reasons set forth in connection with claim 1.

Claim 12 is allowable because there has not been any convincing art applied in the rejection of the claim. The Examiner states that Applicant's granted patent implies ranking of data, however, the is no teaching or suggestion of this step in the method of the invention

disclosed in '842, other than the Examiner's speculation. There was simply no way to provide this information from the earlier system and method.

No change made by the present Amendment introduces any new matter into this case.

For the above-given reasons, applicant asserts that all claims now present in this application are clearly distinguishable over the cited and applied art, and are therefore allowable and patentable. Such affirmative and favorable action is thus respectfully solicited. If the Examiner has any questions regarding the amendment or remarks, the Examiner is invited to contact the undersigned.

Customer Number

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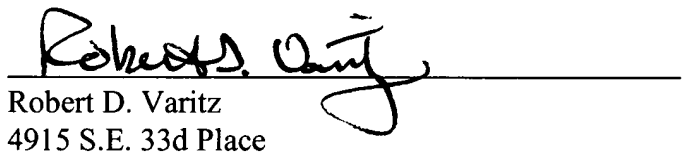
Respectfully Submitted,

ROBERT D. VARITZ, P.C.



Registration No: 31436
Telephone: 503-720-1983
Facsimile: 503-233-7730

Robert D. Varitz
4915 S.E. 33d Place
Portland, Oregon 97202

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I hereby certify that the attached PRELIMINARY AMENDMENT IN SUPPORT OF RCE UNDER 37 C.F.R. § 1.111 and a PTO-2038 credit card authorization form in the amount of $ 395.00 are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to:

MS RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Robert D. Varitz